

RECEIVED
CENTRAL FAX CENTER
AUG 03 2007IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (*Currently Amended*) A method of integrating vocal input recognition and handwriting input recognition comprising the steps of:
 - (A) receiving a syllabic vocal signal representing of an a object alphanumeric symbol;
 - (B) recognizing the input syllabic vocal signal and generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol;
 - displaying the plurality of candidate alphanumeric symbols;
 - (C) receiving an input handwriting signal representing a describing the feature of the object alphanumeric symbol; and
 - (D) extracting a the most coincidental candidate alphanumeric symbol from the plurality of candidate alphanumeric symbols ~~symbol array~~ corresponding to the feature.
2. (*Currently Amended*) The method of claim 1 wherein the handwriting signal in ~~step (D)~~ is a substructure of the object alphanumeric symbol.
3. (*Original*) The method of claim 2 wherein the substructure of the object alphanumeric symbol is the radical of the object alphanumeric symbol.
4. (*Currently Amended*) The method of claim 1, ~~between step (B) and step (C);~~ further comprising ~~step (E) listing the~~ displaying most frequently utilized candidate alphanumeric symbols of the alphanumeric symbol array before receiving the input handwriting signal.
5. (*Currently Amended*) The method of claim 4, ~~after step (D);~~ further comprising ~~step (F) listing~~ replacing the most frequently utilized candidate alphanumeric symbols with the most coincidental candidate alphanumeric symbol of the alphanumeric symbol array ~~to replace the most frequently utilized candidate alphanumeric symbols.~~
6. (*Currently Amended*) A method of integrating vocal input recognition and handwriting input recognition comprising the steps of:

receiving a first input representing of an object alphanumeric symbol;

receiving the first input and generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the first input;

displaying the plurality of candidate alphanumeric symbols;

detecting if there exists a second input representing a feature of describing the object alphanumeric symbol during a predetermined time span; and

if there exists the second input, then extracting a most coincidental extracts the corresponding candidate alphanumeric symbol from the plurality of candidate alphanumeric symbols based on the feature represented by the second input alphanumeric symbol array coinciding with the second input,

wherein the first input is one of whether a vocal input and or a handwriting input, and the second input is the other of whether the vocal input and or the handwriting input.

7. (Currently Amended) the method of claim 6 further comprising ~~a step~~ receiving the first input and then converting the first input into a first signal and; ~~a step~~ receiving the second input and then converting the second input into a second signal.

8. (Currently Amended) The method of claim 6 further comprising ~~a step~~ extracting a the feature of the first input from the first signal; and ~~a step~~ extracting the feature of the second input from the second signal.

9. (Currently Amended) The method of claim 6 further comprising ~~a step~~ extracting a the most frequently utilized candidate alphanumeric symbol from the alphanumeric symbol array where the second input does not exist.

10. (Currently Amended) The method of claim 9 further comprising displaying ~~a step~~ representing the most frequently utilized candidate alphanumeric symbol.

11. (Currently Amended) The method of claim 6 further comprises ~~a step~~ displaying representing a candidate alphanumeric symbol in accordance with the alphanumeric symbol.

12. (Currently Amended) A recognition system integrating vocal and handwriting input recognition comprising:

a vocal input device for receiving a vocal input representing ~~having~~ an object alphanumeric symbol and converting the vocal input into a first signal;

a handwriting input device for receiving a handwriting input representing a describing the feature of the object alphanumeric symbol and convert the handwriting input into a second input;

a vocal similarity estimator for generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol according to the first signal;

a display for displaying the plurality of candidate alphanumeric symbols; and

a handwriting similarity estimator for extracting a the most coincidental candidate alphanumeric symbol from the plurality of candidate alphanumeric symbols; alphanumeric symbol array according to the second signal.

13. (*Original*) The recognition system of claim 12 wherein the feature of the object alphanumeric symbol is a radical of the object alphanumeric symbol.

14. (*Currently Amended*) The recognition system of claim 12 further comprising a vocal database storing a plurality of vocal patterns, the vocal patterns being are provided for the vocal similarity estimator to map with the first signal and to generate generating the alphanumeric symbol array.

15. (*Currently Amended*) The recognition system of claim 12 further comprising comprises a vocal feature extractor for extracting the characteristic of the vocal input from the first signal and transmitting the characteristic to the vocal similarity estimator.

16. (*Currently Amended*) The recognition system of claim 12 further comprising a handwriting database storing a plurality of handwriting patterns, the handwriting patterns being are provided for the handwriting similarity estimator to map with the second signal and to extract the most coincidental candidate alphanumeric symbol ~~most coinciding with the object alphanumeric symbol.~~

17. (*Currently Amended*) A recognition system comprising:

a first input device for receiving a vocal input representing having a alphanumeric symbol and converting the vocal input into a first signal;

a second input device for receiving a handwriting input representing a describing the feature of the object alphanumeric symbol and converting the handwriting input into a second signal;

a first similarity estimator for generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol by the first signal;

a display for displaying the plurality of candidate alphanumeric symbols, wherein the plurality of candidate alphanumeric symbols are displayed in an order according to individual frequent usage rates of the plurality of candidate alphanumeric symbols;

a second similarity estimator for extracting a most coincidental candidate alphanumeric symbol ~~that most coinciding with the object alphanumeric symbol~~ from the alphanumeric symbol array according to ~~by~~ the second signal.

18. *(Currently Amended)* The recognition system of claim 17 further comprising a vocal database for storing a plurality of vocal patterns, and a handwriting database for storing a plurality of handwriting patterns; one of the ~~above~~ vocal database and the handwriting database is provided for the first similarity estimator to map with the first signal and to generate ~~generating~~ the alphanumeric symbol array, the other of the vocal database and the handwriting database is provided for the second similarity estimator to map with the second signal and to extract the most coincidental candidate alphanumeric symbol ~~most coinciding with the object alphanumeric symbol~~.

19. *(Currently Amended)* The recognition system of claim 17 further comprising a first feature extractor and a second feature extractor, the first feature extractor extracting a the feature of the first input from the first signal and transmitting the feature of the first input to the first similarity estimator, the second feature extractor extracting the feature of the second input from the second signal and transmitting the feature of the second input to the second similarity estimator.

20. *(Currently Amended)* A computer accessible recording medium comprising ~~comprises~~ a plurality of programming codes for executing the following step:

receiving a syllable input vocal signal representing of an object alphanumeric symbol;
recognizing the input vocal signal and generating an ~~a~~ alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol;

displaying the plurality of candidate alphanumeric symbols;

08-03-07

04:39pm From-PILLSBURY WINTHROP

703-770-7901

T-819 P.012/017 F-716

HUANG--U.S. Appl. No. 10/642,195

Attorney Docket: 522137-00000085

- Amendment -

receiving an input handwriting signal representing a describing the feature of the object alphanumeric symbol;

extracting a the most coincidental candidate alphanumeric symbol from the alphanumeric symbol array corresponding to the feature of the object alphanumeric symbol.